



QUICK RESPONSE

Saving life and property through effective licensing, plan review, and inspection of fire protection systems.

June 2007

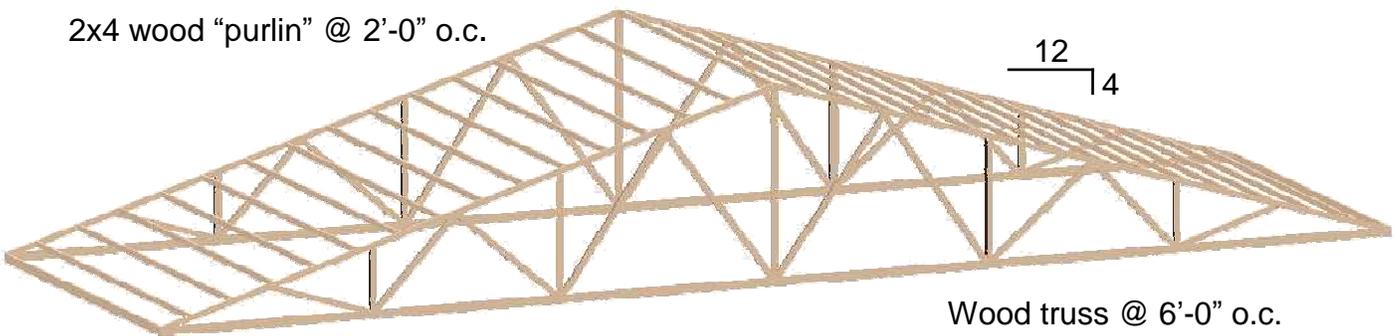
Attic Members

Last month's **QUICK RESPONSE** dealt with the new requirements for the protection of sloped combustible attic spaces with construction members spaced three feet or less on center and a pitch of 4/12 or greater. Unfortunately **NFPA 13** does not clearly define the term **member**.

Construction Type	System Type	Protection Area		Spacing (maximum)	
		ft ²	m ²	ft	m
Noncombustible obstructed and unobstructed and combustible unobstructed with members 3 ft or more on center	Pipe schedule	200	18.6	15	4.6
Noncombustible obstructed and unobstructed and combustible unobstructed with members 3 ft or more on center	Hydraulically calculated	225	20.9	15	4.6
Combustible obstructed with members 3 ft or more on center	All	168	15.6	15	4.6
Combustible obstructed or unobstructed with members less than 3 ft on center	All	130	12.1	15	4.6
Unoccupied attics having combustible wood joist or wood truss construction with members less than 3 ft on center with slopes having a pitch of 4 in 12 or greater	All	120	11.1	8" × 15 (minimum psi) 10" × 12 (minimum 20 psi)	2.4" × 4.6 (minimum 0.48 bar) 3" × 3.7 (minimum 1.34 bar)

*The smaller dimension shall be measured perpendicular to the slope.

Consider the figure below. Are the wood trusses considered as members? Are the 2x4 wood "purlins" considered as members?



After extensive research, the Minnesota State Fire Marshal's office has determined the term "member" as any permanently attached element that is part of the roof structure. As such, in the figure above, both the trusses and the purlins are to be considered as members.